

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE **RECEIVED**  
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In re Application of:

JUL 22 2004

Ichiro MORITA et al.

Serial No. 10/614,986

Art Unit: 3742

**OFFICIAL**

Filed: July 9, 2003

Examiner:

For: OSCILLATION -TYPE  
COMPRESSOR

Atty Docket: 0102/0221

**REQUEST FOR CONSIDERATION OF**  
**INFORMATION DISCLOSURE STATEMENT**Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450**VIA FACSIMILE**  
(703) 872-9306

Sir:

Upon receipt of the Notice of Allowability mailed July 19, 2004, applicants note and confirmed with the examiner that the Information Disclosure Statement filed on June 4, 2004 had not been considered. Therefore, the undersigned hereby requests the examiner to consider the Information Disclosure Statement filed with the U.S. PTO on June 4, 2004, and return the initialed PTO-1449 with a Supplemental Notice of Allowance.

Attached are the date stamped returned postcard evidencing that the IDS was filed on June 4, 2004, the IDS and the PTO-1449, European Search Report and references attached thereto.

Respectfully submitted,

Louis Woo, Reg. No. 31,730  
Law Offices of Louis Woo  
717 North Fayette Street  
Alexandria, Virginia 22314  
Phone: (703) 299-4090Date: July 22, 2004

PTO hereby acknowledges from the dated stamp hereon receipt of the following documents:

Serial No. 10/614,986

Atty Docket No: 0102/00221

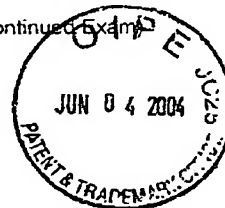
Applicant: Morita et al.

Due Date: 7/10/04

The following was/were received in the U.S. Patent and Trademark Office on the date stamped hereon

<input type="checkbox"/>	Amendment (or Response)
<input type="checkbox"/>	Petition for 1-Mo. Ext. of Time
<input type="checkbox"/>	Response to Restriction Req.
<input type="checkbox"/>	Response to Missing Parts
<input type="checkbox"/>	Executed Declaration
<input type="checkbox"/>	Priority Document(s)
<input type="checkbox"/>	Assignment(s) & cover sheet
<input type="checkbox"/>	Req. to Approve Drawing Changes
<input type="checkbox"/>	Formal Drawings

<input checked="" type="checkbox"/>	IDS with 1449 and references
<input type="checkbox"/>	Issue Fee/Publication Fee Transmittal
<input type="checkbox"/>	Notice of Appeal
<input type="checkbox"/>	Appeal Brief x3
<input type="checkbox"/>	Maintenance fee transmittal
<input type="checkbox"/>	RCE (Req for Continued Exam)
<input type="checkbox"/>	Other:
<input type="checkbox"/>	Dep Acct \$



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JUL 22 2004

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Ichiro MORITA et al.

Serial No. 10/614,986

Filed: July 9, 2003

For: OSCILLATION -TYPE  
COMPRESSOR

Art Unit: 3746

Examiner:

Atty Docket: 0102/0221

OFFICIAL

**SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT**  
**FILED PURSUANT TO 37 CFR 1.97**Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

For insuring compliance with the applicants' duty of disclosure under 37 CFR §1.56, the undersigned hereby submits the attached Form PTO-1449 listing references for consideration by the Examiner in charge of the above-identified patent application. Pursuant to the PTO Waiver Notice dated July 11, 2003, U.S. patents and published applications listed on the PTO-1449 need not be attached to applications filed after June 30, 2003. Accordingly, no such documents as cited in the attached PTO-1449 form are attached. However, if the examiner requires copies any such documents, the examiner is respectfully requested to contact the undersigned. All foreign art and/or publications listed are attached herewith for the examiner's consideration.

These documents are being submitted (check only one of the next four boxes):

- ☐ within three months of the filing of the above U.S. national application or of the date of entry of the U.S. national stage in an International Patent Application (no fee is due); (37 CFR §1.97(b))
- ☒ before receiving a first Office Action on the merits of the above-identified patent application (no fee is due); (37 CFR §1.97(b))

- ☐ following receipt of a first Office Action, but before issuance of a Final Office Action or a Notice of Allowance (if this box is checked, one of the last three boxes also must be checked); (37 CFR §1.97(c))

OR

- ☐ following receipt of a Notice of Allowance or a Final Office Action. The undersigned hereby requests consideration of this Information Disclosure Statement after the mailing the Final Office Action or Notice of Allowance by filing this Information Disclosure Statement under 37 CFR §1.97(d)
- ☐ The Commissioner is authorized to debit \$180.00 for payment of the fee set forth in 37 CFR § 1.17(p). (37 CFR §1.97(d)(2))
- [XX] The undersigned certifies that each item of this information is being submitted within three months of the date it was cited European Patent Office in a counterpart application. (37 CFR §1.97(e)(1))
- \*[Please note that references JP08247025, US3937600, US4613285, US4781546 and WO8807134 cited in the EP search report were previously submitted to the US PTO]
- ☐ The undersigned certifies that, after making reasonable inquiry, he/she has no knowledge that any item of this information was cited by a foreign patent office in a counterpart application or was known more than three months prior to this submission. (37 CFR §1.97(e)(2))

The Commissioner is hereby authorized to charge payment of any deficiency in the above fee(s) or to charge any additional fees required under 37 CFR § 1.16 or 1.17 or credit any overpayment to Deposit Account No. 50-0501. A duplicate copy of this authorization is attached for the Finance Branch.

Respectfully submitted,



Louis Woo, Reg. No. 31,730  
Law Offices of Louis Woo  
717 North Fayette Street  
Alexandria, Virginia 22314  
Phone: (703) 299-4090

Date: June 4, 2004

<b>FORM PTO-1449</b> <b>INFORMATION DISCLOSURE CITATION</b>				Atty Docket 0102/0221		Serial No. 10/614,986	
				Applicant Ichiro MORITA et al.			
				Filing Date July 9, 2003		Group Art Unit 3746	

U.S. PATENT DOCUMENTS							
Examiner Initial		Document Number	Date	Name	Class	Sub-Class	Filing Date
	AA	5,451,727	09/19/1995	Park			12/20/1993
	AB						
	AC						
	AD						
	AE						
	AF						
	AG						
	AH						
	AI						
	AJ						
	AK						

FOREIGN PATENT DOCUMENTS							
		Document Number	Date	Country	Class	Sub-Class	Translation
	AL	1556853	02/07/1969	France			1 <sup>st</sup> page of US equivalent
	AM						
	AN						
	AO						
	AP						

OTHER (Including Author, Title, Date, Pertinent Pages, etc.)			
	AR		
	AS		
	AT		

Examiner	Date Considered
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EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP § 609.  
 Draw line through citation if not in conformance and not considered.  
 Include copy of this form with next communication to Applicant.

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JUL 22 2004



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Europäisches  
Patentamt

Zweigstelle  
in Den Haag  
Recherchen-  
abteilung

European  
Patent Office

Branch at  
The Hague  
Search  
division

Office européen  
des brevets

Département à  
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Division de la  
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Rec'd 26 APR 2004

Action by: .....

Datum/Date

22.04.2004

Zeichen/Ref./Réf.

N.75475A JGL

Anmeldung Nr./Application No./Demande n°/Patent Nr./Patent No./Brevet n°.

03013132.0

Anmelder/Applicant/Demandeur/Patentinhaber/Proprietor/Titulaire

MATSUSHITA REFRIGERATION COMPANY

## COMMUNICATION

The European Patent Office herewith transmits

- ☒ the European search report
- ☐ the declaration under Rule 45 EPC
- ☐ the partial European search report under Rule 45 EPC
- ☐ the supplementary European search report concerning the international application under Article 157(2) EPC relating to the above-mentioned European patent application. Copies of the documents cited in the search report are enclosed.

The following specifications given by the applicant have been approved by the Search Division :

☒ Abstract☒ Title☒ Figure

☐ The abstract was modified by the Search Division and the definitive text is attached to this communication.

☐ The following figure will be published with the abstract, since the Search Division considers that it better characterises the invention than the one indicated by the applicant.

Figure:

☒ Additional copy(copies) of the documents cited in the European search report.

-1

## REFUND OF THE SEARCH FEE

If applicable under Article 10 Rules relating to fees, a separate communication from the Receiving Section on the refund of the search fee will be sent later.



EPO Form 1507 02.93



European Patent  
Office

# EUROPEAN SEARCH REPORT

Application Number  
EP 03 01 3132

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
1 X	PATENT ABSTRACTS OF JAPAN vol. 1997, no. 01, 31 January 1997 (1997-01-31) - & JP 08 247025 A (MATSUSHITA ELECTRIC IND., CO., LTD.), 24 September 1996 (1996-09-24)	5	F04B35/04
A	* abstract * * figure 1 *	4,6	
2 X	FR 1 556 853 A (N.V. PHILIPS) 7 February 1969 (1969-02-07) * page 2, column 1 *	8,9	
A	* figures 1,3 *	4	
3 A	US 3 937 600 A (MECHANICAL TECHNOLOGY INCORPORATED) 10 February 1976 (1976-02-10) * column 1, line 55 - column 2, line 5 * * column 2, line 57 - column 4, line 24 * * figures 1-3 *	1-4	
4 A	US 4 613 285 A (HITACHI, LTD.) 23 September 1986 (1986-09-23) * column 1, line 48 - line 52 * * column 2, line 23 - column 3, line 64 * * figure 1 *	1-3	TECHNICAL FIELDS SEARCHED (Int.Cl.7) F04B
5 A	US 4 781 546 A (MECHANICAL TECHNOLOGY INCORPORATED) 1 November 1988 (1988-11-01) * column 2, line 1 - line 14 * * column 3, line 4 - column 4, line 29 * * figure 1 *	1-3	
6 A	WO 88 07134 A (MECHANICAL TECHNOLOGY INCORPORATED) 22 September 1988 (1988-09-22) * page 3, line 30 - page 4, line 4 * * figures 1,2 *	1	
-/--			
The present search report has been drawn up for all claims			
Place of search MUNICH		Date of completion of the search 1 April 2004	Examiner Gnüchtel, F
CATEGORY OF CITED DOCUMENTS X: particularly relevant if taken alone Y: particularly relevant if combined with another document of the same category A: technological background O: non-written disclosure P: intermediate document		T: theory or principle underlying the invention E: earlier patent document, but published on, or after the filing date D: document cited in the application L: document cited for other reasons &: member of the same patent family, corresponding document	

EPO FORM 1503 03.82 (P04C01)



European Patent  
Office

# EUROPEAN SEARCH REPORT

Application Number  
EP 03 01 3132

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
A	US 5 451 727 A (GOLDSTAR CO., LTD.) 19 September 1995 (1995-09-19) * column 3, line 22 - line 32 * * figures 4,5 * -----	4	
			TECHNICAL FIELDS SEARCHED (Int.Cl.7)
The present search report has been drawn up for all claims			
Place of search MUNICH		Date of completion of the search 1 April 2004	Examiner Gnächtel, F
<p><b>CATEGORY OF CITED DOCUMENTS</b></p> <p>X : particularly relevant if taken alone  Y : particularly relevant if combined with another document of the same category  A : technological background  O : non-written disclosure  P : intermediate document</p> <p>T : theory or principle underlying the invention  E : earlier patent document, but published on, or after the filing date  D : document cited in the application  L : document cited for other reasons  &amp; : member of the same patent family, corresponding document</p>			

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EPO FORM 1503 03 B2 (P04C01)



European Patent  
Office

Application Number

EP 03 01 3132

**CLAIMS INCURRING FEES**

The present European patent application comprised at the time of filing more than ten claims.

☐ Only part of the claims have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims and for those claims for which claims fees have been paid, namely claim(s):

☐ No claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims.

**LACK OF UNITY OF INVENTION**

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

see sheet B

☐ All further search fees have been paid within the fixed time limit. The present European search report has been drawn up for all claims.

☐ As all searchable claims could be searched without effort justifying an additional fee, the Search Division did not invite payment of any additional fee.

☒ Only part of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the inventions in respect of which search fees have been paid, namely claims:

1-6, 8, 9

☐ None of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims, namely claims:



European Patent  
Office

LACK OF UNITY OF INVENTION  
SHEET B

Application Number

EP 03 01 3132

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

1. Claims: 1-3

Use of a plurality of back-pressure chambers being held at different pressure levels in order to solve the technical problem of providing a possibility for automatically controlling the stroke length of the piston.

2. Claim : 4

Use of axially shiftable pipe connections/fittings in order to solve the technical problem of damage by vibration and repetitive stress.

3. Claim : 5

Use of current/voltage detection means and power supply means for controlling the amplitude of oscillation of the piston in order to solve the technical problem of collision of the movable element (piston) with the stationary element (cylinder head).

4. Claim : 6

Use of displacement detection means attached on both the piston and the cylinder in order to solve the technical problem of vibration caused by more complex prior art movable element and displacement detector combinations.

5. Claim : 7

Use of a hydraulic pressure generation mechanism (e.g. in form of a plurality of recesses) in order to solve the technical problem of offset/inclination between the axes of the piston and the cylinder, which leads to friction between these elements.

6. Claims: 8,9

Use of a position changing mechanism whose axial length is variable in order to solve the technical problem of collision of the movable element (piston) with the stationary element (cylinder head).

# ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO.

EP 03 01 3132

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on  
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

01-04-2004

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
JP 08247025	A	24-09-1996	NONE	
FR 1556853	A	07-02-1969	NL 6704284 A	24-09-1968
			DE 1628176 A1	28-10-1971
			ES 351835 A1	16-06-1969
			GB 1185755 A	25-03-1970
			US 3490684 A	20-01-1970
US 3937600	A	10-02-1976	US 4067667 A	10-01-1978
US 4613285	A	23-09-1986	JP 60209676 A	22-10-1985
			DE 3566017 D1	08-12-1988
			EP 0161429 A1	21-11-1985
US 4781546	A	01-11-1988	NONE	
WO 8807134	A	22-09-1988	US 4750871 A	14-06-1988
			EP 0305490 A1	08-03-1989
			WO 8807134 A1	22-09-1988
US 5451727	A	19-09-1995	CN 1096847 A ,B	28-12-1994
			IT MI930979 U1	21-06-1994
			JP 3318415 B2	26-08-2002
			JP 6213156 A	02-08-1994

EPO FORM P0459

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82